| L Number | Hits | Search Text                                | DB .      | Time stamp       |
|----------|------|--|-----------|------------------|
| 1        | 2268 | (breast adj1 cancer) SAME (expression)     | USPAT;    | 2003/01/09 15:08 |
|          |      |  | US-PGPUB; |                  |
|          |      |  | EPO; JPO; |                  |
|          |      |  | DERWENT;  |                  |
|          |      |  | IBM_TDB   |                  |
| 2        | 2731 | (breast adj1 (cancer tumor)) SAME          | USPAT;    | 2003/01/09 15:08 |
|          |      | (expression)                               | US-PGPUB; |                  |
|          |      |  | EPO; JPO; |                  |
|          |      |  | DERWENT;  |                  |
|          |      |  | IBM_TDB   |                  |
| 3        | 1832 | ((breast adj1 (cancer tumor)) SAME         | USPAT;    | 2003/01/09 15:09 |
|          |      | (expression)) and ((cancer tumor) SAME     | US-PGPUB; |                  |
|          |      | (diagnos\$))                               | EPO; JPO; |                  |
|          |      |  | DERWENT;  |                  |
|          |      | •  | IBM_TDB   |                  |
| 4        | 1690 | (((breast adj1 (cancer tumor)) SAME        | USPAT;    | 2003/01/09 15:09 |
|          |      | (expression)) and ((cancer tumor) SAME     | US-PGPUB; |                  |
|          |      | (diagnos\$))) and (antibody)               | EPO; JPO; |                  |
|          |      |  | DERWENT;  |                  |
|          |      | •  | IBM_TDB   |                  |
| 5        | 1424 | ((((breast adj1 (cancer tumor)) SAME       | USPAT;    | 2003/01/09 15:09 |
|          |      | (expression)) and ((cancer tumor) SAME     | US-PGPUB; |                  |
|          |      | (diagnos\$))) and (antibody)) and          | EPO; JPO; |                  |
| ]        |      | (monoclonal SAME antibody)                 | DERWENT;  |                  |
|          |      |  | IBM_TDB   |                  |
| 6        | 770  | (((((breast adjl (cancer tumor)) SAME      | USPAT;    | 2003/01/09 15:10 |
| ,        |      | (expression)) and ((cancer tumor) SAME     | US-PGPUB; |                  |
|          |      | (diagnos\$))) and (antibody)) and          | EPO; JPO; |                  |
| -        |      | (monoclonal SAME antibody)) and (diagnos\$ | DERWENT;  |                  |
|          |      | SAME antibody SAME expression)             | IBM_TDB   |                  |

| L Number | Hits | Search Text                                  | DB                | Time stamp         |  |  |
|----------|------|--|-------------------|--------------------|--|--|
| 1        | 2    | ("6455678").PN.                              | USPAT;            | 2003/01/09 14:05   |  |  |
|          | }    |  | US-PGPUB;         |                    |  |  |
|          | ļ    |  | EPO; JPO;         |                    |  |  |
|          |      |  | DERWENT;          |                    |  |  |
|          |      |  | IBM TDB           |                    |  |  |
| 2        | 2    | (("6455678").PN.) and (cancer tumor)         | USPĀT;            | 2003/01/09 14:21   |  |  |
|          |      |  | US-PGPUB;         |                    |  |  |
|          |      |  | EPO; JPO;         |                    |  |  |
|          |      |  | DERWENT;          |                    |  |  |
|          |      |  | IBM TDB           |                    |  |  |
| 3        | . 2  | ("20020048763").PN.                          | USPAT:            | 2003/01/09 14:21   |  |  |
| ~        |      | (  | US-PGPUB;         |                    |  |  |
|          |      |  | EPO; JPO;         |                    |  |  |
|          |      |  | DERWENT;          |                    |  |  |
|          |      |  | IBM TDB           |                    |  |  |
| 4        | 1    | (("20020048763").PN.) and (cancer\$ tumor\$) | USPAT;            | 2003/01/09 14:50   |  |  |
| 3        | 1    | ( 20020040703 ):IN: / and (cancer camery)    | US-PGPUB;         | 2000, 02, 03 21000 |  |  |
|          |      |  | EPO; JPO;         |                    |  |  |
|          |      |  | DERWENT;          |                    |  |  |
|          |      |  | IBM TDB           |                    |  |  |
| 5        | 1232 | <br>  (breast adj1 (cancer tumor)) SAME      | USPAT;            | 2003/01/09 14:54   |  |  |
| ] 3      | 1232 | (antibody) and detection                     | US-PGPUB;         | 2003/01/03 14.34   |  |  |
|          |      | (antibody) and detection                     | EPO; JPO;         |                    |  |  |
|          |      |  | DERWENT;          |                    |  |  |
|          |      |  | IBM TDB           |                    |  |  |
| _        |      | (/)  | USPAT:            | 2003/01/09 14:55   |  |  |
| 6        | 1    | ((breast adj1 (cancer tumor)) SAME           | US-PGPUB;         | 2003/01/09 14.55   |  |  |
|          |      | (antibody) and detection) and (CZA8)         | EPO; JPO;         |                    |  |  |
|          |      |  | DERWENT;          |                    |  |  |
|          |      |  |                   |                    |  |  |
| ļ _      | (    | (/)  | IBM_TDB<br>USPAT; | 2003/01/09 14:56   |  |  |
| 7        | 678  | ((breast adj1 (cancer tumor)) SAME           |                   | 2003/01/09 14:56   |  |  |
|          |      | (antibody) and detection) and (diagnos\$     | US-PGPUB;         |                    |  |  |
|          |      | SAME breast)                                 | EPO; JPO;         |                    |  |  |
|          |      |  | DERWENT;          |                    |  |  |
|          |      | 1100   | IBM_TDB           | 2002/01/00 14:56   |  |  |
| 8        | 598  | (((breast adj1 (cancer tumor)) SAME          | USPAT;            | 2003/01/09 14:56   |  |  |
|          |      | (antibody) and detection) and (diagnos\$     | US-PGPUB;         |                    |  |  |
|          |      | SAME breast)) and (diagnos\$ SAME antibody)  | EPO; JPO;         |                    |  |  |
|          |      |  | DERWENT;          |                    |  |  |
| _        |      |  | IBM_TDB           | 0000/01/00 1:      |  |  |
| 9        | 550  | ((((breast adj1 (cancer tumor)) SAME         | USPAT;            | 2003/01/09 14:56   |  |  |
|          |      | (antibody) and detection) and (diagnos\$     | US-PGPUB;         |                    |  |  |
|          |      | SAME breast)) and (diagnos\$ SAME            | EPO; JPO;         |                    |  |  |
|          |      | antibody)) and (antibody SAME monoclonal)    | DERWENT;          |                    |  |  |
|          |      |  | IBM TDB           |                    |  |  |

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SEQ ID NO: 2
US-08-842-382-2
; Sequence 2, Application US/08842382
 Patent No. 6455678
   GENERAL INFORMATION:
    APPLICANT: Miraglia, Sheri
    APPLICANT: Godfry, Wayne G.
    APPLICANT: Yin, Amy H. APPLICANT: Buck, David W.
    TITLE OF INVENTION: HUMAN HEMATOPOIETIC STEM AND PROGENITOR
    TITLE OF INVENTION: CELL ANTIGEN AND METHODS FOR ITS USE
    NUMBER OF SEQUENCES: 2
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: COOLEY GODWARD LLP
      STREET: 5 PALO ALTO SQUARE
      CITY: PALO ALTO
      STATE: CA
      COUNTRY: USA
      ZIP: 94306
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
     SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/842,382
      FILING DATE: 23-APR-1997
      CLASSIFICATION: 436
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/639,891
      FILING DATE: 26-APR-1996
    ATTORNEY/AGENT INFORMATION:
      NAME: Neeley, Richard L.
      REGISTRATION NUMBER: 30,092
      REFERENCE/DOCKET NUMBER: AMCE-012/01US
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (415) 843-5070
      TELEFAX: (415) 857-0663
  INFORMATION FOR SEQ ID NO: 2:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 865 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
    MOLECULE TYPE: protein
US-08-842-382-2
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 Best Local Similarity 100.0%; Pred. No. 0;
                             0; Mismatches
                                                 Indels
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Qу
```

| D   | b 241 |  | 300 |
|-----|-------|--|-----|
| · Q | у 301 | SLNDPLCLVHPSSETCNSIRLSLSQLNSNPELRQLPPVDAELDNVNNVLRTDLDGLVQQG | 360 |
| D   | b 301 | SLNDPLCLVHPSSETCNSIRLSLSQLNSNPELRQLPPVDAELDNVNNVLRTDLDGLVQQG | 360 |
| Q   | у 361 | YQSLNDIPDRVQRQTTTVVAGIKRVLNSIGSDIDNVTQRLPIQDILSAFSVYVNNTESYI | 420 |
| D   | b 361 | YQSLNDIPDRVQRQTTTVVAGIKRVLNSIGSDIDNVTQRLPIQDILSAFSVYVNNTESYI | 420 |
| Q   | y 421 | HRNLPTLEEYDSYWWLGGLVICSLLTLIVIFYYLGLLCGVCGYDRHATPTTRGCVSNTGG | 480 |
| D   | b 421 | HRNLPTLEEYDSYWWLGGLVICSLLTLIVIFYYLGLLCGVCGYDRHATPTTRGCVSNTGG | 480 |
| Q   | y 481 | VFLMVGVGLSFLFCWILMIIVVLTFVFGANVEKLICEPYTSKELFRVLDTPYLLNEDWEY | 540 |
| D   | b 481 | VFLMVGVGLSFLFCWILMIIVVLTFVFGANVEKLICEPYTSKELFRVLDTPYLLNEDWEY | 540 |
| Q   | y 541 | YLSGKLFNKSKMKLTFEQVYSDCKKNRGTYGTLHLQNSFNISEHLNINEHTGSISSELES | 600 |
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| Q   | y 601 | LKVNLNIFLLGAAGRKNLQDFAACGIDRMNYDSYLAQTGKSPAGVNLLSFAYDLEAKANS | 660 |
| D   | b 601 | LKVNLNIFLLGAAGRKNLQDFAACGIDRMNYDSYLAQTGKSPAGVNLLSFAYDLEAKANS | 660 |
| Q   | y 661 | LPPGNLRNSLKRDAQTIKTIHQQRVLPIEQSLSTLYQSVKILQRTGNGLLERVTRILASL | 720 |
| Dì  |       | LPPGNLRNSLKRDAQTIKTIHQQRVLPIEQSLSTLYQSVKILQRTGNGLLERVTRILASL |     |
| Q   | -     | DFAQNFITNNTSSVIIEETKKYGRTIIGYFEHYLQWIEFSISEKVASCKPVATALDTAVD |     |
| D   |       | DFAQNFITNNTSSVIIEETKKYGRTIIGYFEHYLQWIEFSISEKVASCKPVATALDTAVD |     |
| Q   | -     | VFLCSYIIDPLNLFWFGIGKATVFLLPALIFAVKLAKYYRRMDSEDVYDDVETIPMKNME |     |
| DI  |       | VFLCSYIIDPLNLFWFGIGKATVFLLPALIFAVKLAKYYRRMDSEDVYDDVETIPMKNME | 840 |
| Q   |       | NGNNGYHKDHVYGIHNPVMTSPSQH 865                                |     |
| D)  | b 841 | NGNNGYHKDHVYGIHNPVMTSPSQH 865                                |     |

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DT
     04-FEB-2002 (first entry)
XX
DΕ
     Peptide #5458 encoded by human foetal liver single exon probe.
XX
KW
     Human; foetal liver; gene expression; single exon nucleic acid probe.
XX
os
    Homo sapiens.
XX
    WO200157277-A2.
PN
XX
     09-AUG-2001.
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     30-JAN-2001; 2001WO-US00669.
PF
XX
     04-FEB-2000; 2000US-0180312.
PR
     26-MAY-2000; 2000US-0207456.
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     30-JUN-2000; 2000US-0608408.
    03-AUG-2000; 2000US-0632366.
21-SEP-2000; 2000US-0234687.
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     27-SEP-2000; 2000US-0236359.
PR
    04-OCT-2000; 2000GB-0024263.
PR
XX
     (MOLE-) MOLECULAR DYNAMICS INC.
PΑ
XX
PΙ
     Penn SG,
              Hanzel DK, Chen W, Rank DR;
XX
    WPI; 2001-483447/52.
DR
XX
PT
    Human genome-derived single exon nucleic acid probes useful for
    analyzing gene expression in human fetal liver -
PT
XX
PS
    Claim 27; SEQ ID NO 30587; 639pp + sequence listing; English.
XX
    The invention relates to a single exon nucleic acid probe for
CC
    measuring human gene expression in a sample derived from human foetal
CC
    liver. The single exon nucleic acid probes may be used for predicting,
CC
    measuring and displaying gene expression in samples derived from human
CC
    fetal liver. The present sequence is a peptide encoded by a single exon
CC
    nucleic acid probe of the invention.
CC
    Note: The sequence data for this patent did not form part of the
CC
    printed specification, but was obtained in electronic format directly
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    from WIPO at ftp.wipo.int/pub/published pct sequences.
CC
XX
    Sequence
               72 AA;
SQ
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 Best Local Similarity 100.0%; Pred. No. 8.3e-23;
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SEQ ID NO: 4
US-09-864-761-38497
; Sequence 38497, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
  APPLICANT: Penn, Sharron G.
  APPLICANT: Rank, David R.
  APPLICANT: Hanzel, David K.
  APPLICANT: Chen, Wensheng
  TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES
USEFUL FOR
  TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
  FILE REFERENCE: Aeomica-X-1
   CURRENT APPLICATION NUMBER: US/09/864,761
   CURRENT FILING DATE: 2001-05-23
   PRIOR APPLICATION NUMBER: US 60/180,312
   PRIOR FILING DATE: 2000-02-04
   PRIOR APPLICATION NUMBER: US 60/207,456
   PRIOR FILING DATE: 2000-05-26
  PRIOR APPLICATION NUMBER: US 09/632,366
   PRIOR FILING DATE: 2000-08-03
  PRIOR APPLICATION NUMBER: GB 24263.6
  PRIOR FILING DATE: 2000-10-04
  PRIOR APPLICATION NUMBER: US 60/236,359
  PRIOR FILING DATE: 2000-09-27
   PRIOR APPLICATION NUMBER: PCT/US01/00666
  PRIOR FILING DATE: 2001-01-30
   PRIOR APPLICATION NUMBER: PCT/US01/00667
   PRIOR FILING DATE: 2001-01-30
  PRIOR APPLICATION NUMBER: PCT/US01/00664
  PRIOR FILING DATE: 2001-01-30
   PRIOR APPLICATION NUMBER: PCT/US01/00669
  PRIOR FILING DATE: 2001-01-30
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  PRIOR FILING DATE: 2001-01-30
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   PRIOR FILING DATE: 2001-01-30
   PRIOR APPLICATION NUMBER: PCT/US01/00661
  PRIOR FILING DATE: 2001-01-30
  PRIOR APPLICATION NUMBER: PCT/US01/00670
  PRIOR FILING DATE: 2001-01-30
  PRIOR APPLICATION NUMBER: US 60/234,687
   PRIOR FILING DATE: 2000-09-21
   PRIOR APPLICATION NUMBER: US 09/608,408
   PRIOR FILING DATE: 2000-06-30
   PRIOR APPLICATION NUMBER: US 09/774,203
   PRIOR FILING DATE: 2001-01-29
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    OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 2.5
    OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 3.5
    OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 2.5
    OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL =
    OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 2.8
    OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL =
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; OTHER INFORMATION: EST\_HUMAN HIT: AU133399.1, EVALUE 3.00e-17  $\mbox{US-09-864-761-38497}$ 

Query Match 7.9%; Score 353; DB 10; Length 72; Best Local Similarity 100.0%; Pred. No. 5.7e-21; Matches 72; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 313 LSQLNSNPELRQ 324 ||||||||||| Db 61 LSQLNSNPELRQ 72